

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (previously presented): A digital communication system comprising:
a channel state judging section for judging a channel state of an inputted signal by using a field sync of the inputted signal; and
an equalizing section for compensating for a channel distortion of the inputted signal by initializing a parameter on the basis of the judged channel state,
wherein the channel state is one of a static state and a dynamic state.
2. (currently amended): A digital communication system comprising:
a channel state judging section for judging a channel ~~states~~state of an inputted signal by using a field sync of the inputted signal; and
an equalizing section for compensating for a channel distortion of the inputted signal by initializing a parameter on the basis of the judged channel state,
wherein the channel state judging section comprises:
a channel prediction section for predicting the channel state of the inputted signal by means of the field sync;
a plurality of buffers for storing state information regarding a plurality of channels predicted by means of a plurality of field syncs;

a calculating section for calculating a difference between the state information regarding ~~N~~ a first number of the plurality of channels stored in ~~N~~ a second number of the plurality of buffers, ~~wherein N is a natural number~~; and

a judging section for judging the channel state on the basis of the calculated difference.

3. (currently amended): The digital communication system as claimed in claim 2, wherein the judging section judges the channel ~~states~~ state by means of a threshold value applied to the calculated difference.

4. (original): The digital communication system as claimed in claim 1, wherein the field sync is a PN sequence.

5. (previously presented): An operation method in a digital communication system, the method comprising the steps of:

(1) judging a channel state of an inputted signal by means of a field sync of the inputted signal; and

(2) compensating for a channel distortion of the inputted signal by initializing a parameter on the basis of the judged channel state,

wherein the channel state is one of a static state and a dynamic state.

6. (currently amended): An operation method in a digital communication system, the method comprising the steps of:

(1) judging a channel state of an inputted signal by means of a field sync of the inputted signal; and

(2) compensating for a channel distortion of the inputted signal by initializing a parameter on the basis of the judged channel state,

wherein step (1) comprises the steps of:

(a) predicting the channel state of the inputted signal by means of the field sync;

(b) storing state information regarding ~~N~~a predetermined number of channels predicted by means of ~~N~~the same number of field syncs in ~~N~~the same number of buffers as the predetermined number of the channels, ~~wherein N is a natural number~~;

(c) calculating a difference between the state information regarding the ~~N~~predetermined number of the channels stored in the ~~N~~same number of the buffers; and

(d) judging the channel state on the basis of the calculated difference.

7. (previously presented): The method as claimed in claim 6, wherein, in step (d), the channel state is judged by means of a threshold value applied to the calculated difference.

8. (original): The method as claimed in claim 5, wherein the field sync is a PN sequence.

9. (currently amended): The digital communication system as claimed in claim 2,
wherein a the first number N of the buffers equals a the second number N of the channels and a
number N of the field synes.